STATE OF WASHINGTON

DEPARTMENT OF FISH & WILDLIFE LANDS AND RESTORATION SERVICES PROGRAM

Salmonid Screening, Habitat Enhancement & Restoration Division (SSHEAR)

OFF-CHANNEL SITE INVENTORY DATA

General Information:

Region: North Coast Observer(s): Nettnin

River System: Sol Duc River Date: 11/25/96

Site Identifier: S-0304 WRIA: 20.0304

River Mile Location: 16.5 mi RB/LB: RB

Local Name: Gunderson Creek Trib. to: Sol Duc R. 20,0096

Legal Description: SE¼ Sec30 T29N R13W County: Clallam

Habitat Type: Lower valley wall tributary

Landowner: () Federal (X) State () County () Other Government (X) Private

Rayonier Timber Co.Possibly Dahlgren

- Department of Natural Resources

Directions to site:

Head north from Forks on HWY 101 about 3.1 mi. Turn left (west) about 0.1 mi. beyond MP 195 onto D-2000. Proceed west on D-2000 for 0.9 - 1.0 mile to the second major stream crossing.

Site Overview:

Gunderson Creek is a third order stream. The watershed is comprised of approxamatly 1800 acres of timberlandof which, the majority has been logged. There are two major tributaries, the East Fork and the West Fork and numerous smaller ones. The West Fork (which is the mainstem) sources on Tyee Hill and Gunderson Mountain and drains to a large wetland between the two hills. From there it flows northeasterly through a V-notch valley to get around the toe of Gunderson Mountain. It then flows southerly along the base of Gunderson Mountain, on the west side of the Sol Duc Valley. There is a change in elevation from 200 feet at the confluence with the Sol Duc River, to 1200 feet at the top of Tyee Hill and Gunderson Mountain. Its sources are good gravel recruters. The East Fork (considered as a tributary) sources on the toe of Tyee Hill and flows across a broad, flat terrace. There are numerous wetlands associated with this fork, which should provide excellent rearing habitat.

Habitat Information:

Water source:

- Springs and surface runoff

Intermittent/year-around:

- Year-around

Estimated flows (cfs):

- Lower end- 30 - 40; At confluence with E. F. Gunderson- 22; Upper end- .1 - .2

Water temperatures: 3.0 - 6.0°C

Adjacent stream temperature Sol Duc River (20.0096); 3.0 - 5.5°C

Other water observations: Water is clear

Site area measurements: () Indirect (X) Direct () Combination

Width: Channel- 0.3 - 27 m Depth: Channel- 15 - 60 cm Total length surveyed: 7500 m

Total existing habitat area (est.): 63,000 m²

Spawning area: Mainstem: 5,700 m² Tribs: 100 m² Totals: 5,800 m² Impounded area: Mainstem: * m² Tribs: 8,480 m² Totals: 8,400 m² Totals: 49,000 m² Totals: 49,000 m²

* See rearing descriptions.

Spawning habitat conditions: () None () Poor () Fair () Good (X) Excellent

Describe spawning habitat:

- In the lower reach, below the D-2000 the gradient is moderate.
- The aggregate ranges from scattered boulders, heavy cobble, gravel, and light sand.
- The aggregate ranges more gravel with cobble intermixed, and pockets of sand.
- Above the D-2000, the gradient is moderate/gentle.

Rearing habitat conditions: () None () Poor (X) Fair () Good (X) Excellent

Describe pond and other rearing habitat:

- *There are two significant beaver dams in this part of the system. They are not wide enough to qualify as impounded ponds. They do provide excellent rearing in the middle and upper most reaches.
- The mainstem provides excellent summer rearing but has high velocities during the winter months
- There are two off channel sites that provide excellent winter rearing and all of the E.F. Gunderson provides good winter and some summer rearing.
- All of the mainstem and most of the off channel area has an RMZ.

Unaccessible habitat:

- None.

Wetland information: () Bog (X) Marsh (X) Scrub-shrub Wetland (X) Forested Wetland

- There are approxamatly 40 - 70 acres of open marsh and scrub-shrub wetlands, and approxamatly 20 - 30 acres of wooded wetland.

Flooding potential: (X) Low () Medium () High

- This system will experience flushing flows from time to time, but does not receive overbank storage from the Sol Duc River.

Fish Information:

Site entry condition to the Sol Duc River: () Poor () Fair (X) Good

Coho access and use: Juvenile- (X) Unknown () None () Poor () Fair (X) Good Adult- () Unknown () None () Poor () Fair (X) Good

- It is known that Adults spawn in the mainstem all the way to the upper marsh. It is also known that juvenile coho use the off channel rearing sites, through observations and captures. It is not known however to what extent they use the mainstem.
- Ten redds were observed above the D-2000, which is historically coho spawning area, and five adult morts.
- There is spawner information at the Quileute Natural Resources office in La Push, also at the Washington Department of Fish and Wildlife office in Forks.

Other species access and use: (X)Chinook ()Chum ()Pink ()Sockeye ()Res. trout (X)Trout

- Sixteen redds, four adult morts and seven live chinook were observed below the D-2000.
- One 15" cutthroat trout mort was observed above the D-2000.

Habitat Improvements:

Enhancement opportunities:

- Replace old and poorly installed culverts along the T-1010
- Replace beaver dams with controls and fishways.
- Protect the integrity of the stream.

Additional Comments:

- There has been some confusion with the location of the named channel. The USGS maps and the WDFW Stream Catalog show that Gunderson Creek generally follows the course of what is now the E.F. Gunderson Creek and did not indicate that what is now the W.F. Gunderson Creek even existed. On the ground the physical characteristics remain the same for the W.F. Gunderson and the lower reach (mainstem) which are totally different than the E.F. Gunderson. Also there is more flow in the West Fork then in the East Fork. In the past two decades the spawner survey crews assumed what is now the West Fork to be the mainstem, therefore it is only sensible to continue to consider the West Fork to be the continuation of the mainstem and the East Fork to be a tributary.

Attachments Available:

Contact respective SSHEAR habitat biologist for the following checked items:

(X) Aerials	(X) Sketch	(X) Maps	() Culvert Report
() Other references	() Spawning surveys	() Juvenile trapping	() Fishway Report

DOC: S-0304



